



New Mexico Environment Department

Ozone in the Four Corners Area: Data Gaps



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Four Corners Ozone

- What data we have
- What data we need (the gaps)
- Resources required to obtain the data we need and fill the gaps



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Analysis Areas

1. Monitoring—What are the boundaries of the region with elevated ozone?
2. Emissions Inventory—What are the sources/facilities that may contribute to formation of ozone?
3. Modeling—What sources contribute significantly? What are the controls that could reduce ozone?



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What we have:

- Monitors in Bloomfield, Substation and Southern Ute for ozone, NO₂ at Bloomfield
- Don't know how far to the south, east or west elevated ozone occurs



New Mexico Environment Department Monitoring Gaps

What we don't have:

- Monitors to the east, west or south
- VOC concentrations and speciation to tell us what VOCs are prevalent (but will monitor this summer)



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- EPA funding for VOC monitoring analysis this summer
- Interest from other states/tribes in monitoring



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Emissions Inventory

What we have:

- Permitted and registered “point” sources: compressor stations, gas plants, power plants, tank farms, etc. All facilities with emissions greater than 10 tpy of NO₂ and VOC that are in San Juan County, but not on the Jicarilla or Navajo nation lands.
- Mobile source inventory based on county population



New Mexico Environment Department Emissions Inventory Gaps

What we don't have:

- Facilities with emissions less than 10 tpy of NO₂ and VOC: wellhead compressors, small field engines, small auto body and paint shops
- Facilities in Colorado, Utah, Arizona and Indian lands (**APS 4-Corners emissions data**)
- Area sources: gas stations, dry cleaners, city sources
- Refined Mobile source inventory
- Biogenic sources
- Flash Tank Emissions
- Wildfire Emissions



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- EPA grant funds (\$50K) for inventory
- May be able to get assistance from other states/tribes on sources in other areas



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Modeling

What we have:

- HYSPLIT model runs to look at transport (inconclusive)
- Regional Haze modeling inputs from UC Riverside to look at transport over region
- NMED capability to run model CMAQ
- NMED capability to generate met data
- Terrain data



New Mexico Environment Department Modeling Gaps

- Met data for ozone episodes
- Model input for local scale (not regional) modeling
- Model-ready emissions inventory using an emissions processing model



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Modeling Resources

- With EAC, can leverage EPA and legislature for funds
- Potential BLM funds tied to RMP EIS??
- Geographic Initiative Funds from EPA to study regional transport (through Western Governors Association)



New Mexico Environment Department **QUESTIONS/COMMENTS**

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